WHAT IS CLAIMED IS:

Sub C1

1. An occlusive device for use in interventional therapy and vascular surgery adapted to be inserted into a portion of a vasculature for occluding the portion of the vasculature, comprising:

a vasoocclusive coil having a primary coil configuration with a loop at at least one end;

said vasoocclusive coil being formed from at least one multi-stranded micro-cable, each said multi-stranded micro-cable having a plurality of flexible strands of a resilient material, and at least one radiopaque strand to provide a radiopaque marker of the deployed configuration of a device made of the cable during vascular surgery.

2. The occlusive device of Claim 1, wherein said vasoocclusive coil has a primary coil configuration with a helical loop at a distal end of the coil.

3. The occlusive device of Claim 1, wherein said helical loop has a J-shape configuration.

4. The occlusive device of Claim 1, wherein said vasoocclusive coil has a primary coil configuration with a helical loop at the proximal and distal ends of the coil.

5. The occlusive device of Claim 4, wherein said helical loops each have a J-shape configuration.

6. The occlusive device of Claim 1, wherein said helical loop has a diameter of about 2 mm.

7. The occlusive device of Claim 4, wherein said helical loops each have a diameter of about 2 mm.

8. The occlusive device of Claim 1, wherein said vasoocclusive coil comprises at least one loop intermediate the proximal and distal ends of the coil.

9. The occlusive device of Claim 4, wherein said vasoocclusive coil comprises two loops intermediate the proximal and distal ends of the coil.

10. The occlusive device of Claim 1, wherein said plurality of strands are helically wound.

11. The occlusive device of Claim 1, wherein said plurality of flexible strands are parallel longitudinal strands.

12. The occlusive device of Claim 1, wherein at least one of said plurality of strands comprises a super-elastic material.

13. The occlusive device of Claim 1, wherein said plurality of strands are comprised of a super-elastic material.

14. The occlusive device of Claim 13, wherein said super-elastic material comprises a nickel titanium alloy.

15. The occlusive device of Claim 1, wherein at least one of said strands comprises a shape memory material.

16. The occlusive device of Claim 1, wherein said plurality of flexible strands of a resilient material are comprised of a shape memory material.

17. The occlusive device of Claim 16, wherein said shape memory material comprises a nickel-titanium alloy.

18. The occlusive device of Claim 17, wherein said shape memory nickel-titanium alloy is heat treated such that the alloy is highly flexible at a temperature appropriate for introduction into the body via a catheter, and after placement, the device will take on the primary coil configuration.

19. The occlusive device of Claim 15, wherein said shape memory material comprises a shape memory polymer.

20. The occlusive device of Claim 1, wherein said plurality of strands comprises a plurality of exterior strands surrounding at least one interior strand.

21. The occlusive device of Claim 1, wherein said plurality of strands comprises a plurality of exterior strands surrounding a central core.

22. The occlusive device of Claim 1, wherein said radiopaque strand comprises at least one centrally, axially disposed radiopaque wire.

23. The occlusive device of Claim 1, wherein said radiopaque wire is made of platinum.

24. The occlusive device of Claim 1, wherein said radiopaque wire is made of tungsten.

25. The occlusive device of Claim 1, wherein said radiopaque wire is made of gold.

26. The occlusive device of Claim 1, wherein said micro-cable comprises a plurality of radiopaque strands.

27. The occlusive device of Claim 1, wherein said micro-cable comprises a central core.

28. The occlusive device of Claim 27, wherein said central core of said micro-cable comprises copper.

29. The occlusive device of Claim 27, wherein said central core of said micro-cable comprises a copper alloy.

30. The occlusive device of Claim 1, wherein said radiopaque wire is approximately from .0007 to .0015 inches in diameter.

31. The occlusive device of Claim 1, wherein said strands of the micro-cable are bundled by at least one outer cover to produce a composite banded cable.

32. The occlusive device of Claim 31, wherein said outer cover comprises a sheath to constrain said strands of said micro-cable about a longitudinal axis.

33. The occlusive device of Claim 31, wherein said outer cover comprises an outer sheath of material to provide bending stiffness and constrain said longitudinal strands about said longitudinal axis.

34. The occlusive device of Claim 33, wherein said sheath comprises a containment strand wound about said longitudinal strands.

35. The occlusive device of Claim 33, wherein said sheath is made of low friction material.

36. The occlusive device of Claim 33, wherein said sheath is made of a fluoropolymer.

37. The occlusive device of Claim 33, wherein said sheath comprises a heat shrinkable plastic tube.

38. The occlusive device of Claim 33, wherein said sheath comprises a plurality of heat shrink plastic covers placed to provide bending stiffness in said cable which varies with the position on said cable.

39. The occlusive device of Claim 31, wherein said strands of the micro-cable are bundled by a plurality of bands disposed at intervals along said micro-cable to produce a composite banded cable.

40. The occlusive device of Claim 39, wherein said strands are laid parallel within the composite banded cable.

41. The occlusive device of Claim 39, wherein said strands are twisted within the composite banded cable.

42. The occlusive device of Claim 39, wherein composite cable comprises a single inner micro-cable.

43. The occlusive device of Claim 39, wherein said exterior wrapped cover is wound at varying intervals along the outside to provide variations in the torqueability and stiffness of the composite cable.

44. The occlusive device of Claim 43, wherein the width of the outer cover is varied along the composite cable.

45. The occlusive device of Claim 39, wherein said outer covering varies in cross section along its length to provide bending stiffness of said composite cable which varies along said composite cable.

46. The occlusive device of Claim 31, wherein the number of strands and the degree to which they extend along said composite cable within the outer covering varies along said composite cable.

47. The occlusive device of Claim 33, wherein outer covering comprises a plurality of layers formed of different materials in order to provide a graduated bending and stiffness characteristic over the length of the cable.

48. The occlusive device of Claim 1, wherein said multi-stranded micro-cable is approximately .0021 to .0045 inches in diameter

49. The occlusive device of Claim 39, wherein said composite micro-cable comprises a plurality of micro-cables disposed within said outer cover in order to provide desired bending and strength characteristics.

50. The occlusive device of Claim 49, wherein said plurality of micro-cables are helically wound within said outer cover.

51. The occlusive device of Claim 49, wherein said plurality of micro-cables extend parallel and longitudinally within said outer cover.

52. The occlusive device of Claim 49, wherein said plurality of micro-cables are bundled by at least one outer cover to produce said composite banded cable.

53. The occlusive device of Claim 52, wherein said plurality of micro-cables are banded at intervals by a plurality of bands.

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